

CLAIMS

What is claimed is:

1. An allocation method for allocating codewords of source words to be recording on a recording medium, the method comprising:

when a preceding codeword b and a following codeword c form a code stream Y, allocating one of two selectable codewords b1 and b2 as the codeword b, wherein the codewords b1 and b2 have opposite INVs which are parameters indicating whether the number of '1s' contained in a codeword is an odd number or an even number and

when the code stream of b1 and c is Y1, and the code stream of b2 and c is Y2, allocating codewords such that INVs of Y1 and Y2 are maintained to be opposite when the codeword b1, b2 or c should be replaced by another codeword in compliance with a predetermined boundary condition between codewords.

2. The method of claim 1, wherein when the predetermined boundary condition is that the number of continuous '0s' between codewords should be at least 2, and when the number of continuous '0s' from the Least Significant Bit (LSB) of the codeword c toward the Most Significant Bit (MSB) is 1, codeword b which does not satisfy the boundary condition and is xxxxxxxxxxxx1001 or xxxxxxxxxxx10001 appears in both b1 and b2.

3. The method of claim 1, wherein when the number of continuous '0s' between the codewords a and b is 1 or 0, the codeword a or b is changed such that the number 0s forming the boundary is greater than 2 and less than 10.